

EK

Notice of Allowability

Application No.

10/507,379

Applicant(s)

YLITALO, JARI

Examiner

Art Unit

Paul Ip

2837

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the response filed on 12/22/2006.
2. ☒ The allowed claim(s) is/are 1-7,9-15,17,18,20,21 and 23-30.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.


Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| <ol style="list-style-type: none"> 1. <input type="checkbox"/> Notice of References Cited (PTO-892) 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | <ol style="list-style-type: none"> 5. <input type="checkbox"/> Notice of Informal Patent Application 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance 9. <input type="checkbox"/> Other _____. |
|---|--|


Paul Ip
Primary Examiner
AU 2837

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Sheree Rowe on Jan. 9 and 17, 2007.

The application has been amended as follows:

1. **(Currently Amended)** A system for at least one of limiting the motion of a rotor of a propeller motor of a propulsion unit and restraining the angular position of a rotor of a propeller motor of a propulsion unit, said the system comprising:

at least one propulsion unit comprising:

a propeller; and

a propeller motor comprising a magnetization device and stator windings, an electrical power network;

a frequency converter connected to an the electrical power network; and

a switch arrangement disconnecting the propeller motor from the electrical power network and for short-circuiting the stator windings of the propeller motor to restrain the angular position of the rotor of the propeller motor of the propulsion unit.

9. **(Currently Amended)** A system for at least one of reducing the speed and limiting the motion of a motor of a propulsion unit, the system comprising:

at least one propulsion unit comprising:

a propeller; and

a turning arrangement including at least one motor unit for turning the propulsion unit, the at least one motor unit including a magnetization device and stator windings;

an electrical power network;

a frequency converter connected to the electrical power network; and

a switch arrangement for disconnecting the at least one motor unit of the turning arrangement for turning the propulsion unit from the electrical power network and for short-circuiting the stator windings of the at least one motor unit of the turning arrangement for turning the propulsion unit to restrain the angular position of the rotor of the propeller motor of the propulsion unit.

17. **(Currently Amended)** a method for at least one of limiting the motion of a rotor of a propeller motor of a propulsion unit and restraining the angular position of a rotor of a propeller motor of a propulsion unit in a system having at least one propulsion unit, the at least one propulsion unit including a propeller and a propeller motor including a magnetization device and stator windings, an electrical power network, a frequency converter connected to the electrical power network, and a switch arrangement, the method comprising:

detecting a need for braking the propeller motor;
disconnecting the propeller motor from the electrical power network; ~~and~~
short-circuiting the stator windings of the propeller motor; and
restraining the angular position of the rotor of the propeller motor of the
propulsion unit.

20. **(Currently Amended)** A method for at least one of reducing the speed and limiting the motion of a motor of a propulsion unit in a system having at least one propulsion unit including a propeller, a turning arrangement including at least one motor unit for turning the propulsion unit, the at least one motor unit including a magnetization device and stator windings, an electrical power network, a frequency converter connected to the electrical power network, and as switch arrangement, the method comprising the steps of:

detecting a need for braking the at least one motor unit;
disconnecting the at least one motor unit of the turning arrangement for turning the propulsion unit from the electrical power network; and
short-circuiting the stator windings of the at least one motor unit of the turning arrangement for turning the propulsion unit to restrain the angular position of the rotor of the propeller motor of the propulsion unit.

25. **(Currently Amended)** A system for at least one of reducing the speed and limiting the motion of a motor of a propulsion unit, the system comprising:

at least one propulsion unit comprising:

a propeller; and

a propeller motor comprising a magnetization device and stator windings;

an electrical power network;

a frequency converter connected to the electrical power network; and

a switch arrangement for detecting absence of supply power to the propeller motor and for short-circuiting the stator windings of the propeller motor to restrain the angular position of a rotor of the propeller motor of the propulsion unit.

26. **(Currently Amended)** A system for at least one of reducing the speed and limiting the motion of a motor of a propulsion unit, the system comprising:

at least one propulsion unit comprising:

a propeller; and

a turning arrangement including at least one motor unit for turning the propulsion unit, the at least one motor unit including a magnetization device and stator windings;

an electrical power network;

a frequency converter connected to the electrical power network; and

a switch arrangement for detecting absence of supply power to the at least one motor unit of the turning arrangement for turning the propulsion unit from the electrical power network and for short-circuiting the stator windings of the at least one motor unit

Art Unit: 2837

of the turning arrangement for turning the propulsion unit to restrain the angular position of a rotor of the propeller motor of the propulsion unit.

27. (Currently Amended) A method for at least one of reducing the speed and limiting the motion of a motor of a propulsion unit in a system having at least one propulsion unit including a propeller, and a propeller motor comprising a magnetization device and stator windings, an electrical power network, a frequency converter connected to the electrical power network, and a switch arrangement, the method comprising the steps of:

detecting absence of electrical supply power to the propeller motor; and
short-circuiting the stator windings of the propeller motor; and
restraining the angular position of a rotor of the propeller motor of the propulsion unit.

28. (Currently Amended) A method for at least one of reducing the speed and limiting the motion of a motor of a propulsion unit in a system having at least one propulsion unit including a propeller, and a turning arrangement including at least one motor unit for turning the propulsion unit, the at least one motor unit including a magnetization device and stator windings, an electrical power network, a frequency converter connected to the electrical power network, and a switching arrangement, the method comprising the steps of:

detecting absence of supply power to the at least one motor unit of the turning arrangement for turning the propulsion unit from the electrical power network; and short-circuiting the stator windings of the at least one motor unit of the turning arrangement for turning the propulsion unit; and
restraining the angular position of a rotor of the propeller motor of the propulsion unit.

REASONS FOR ALLOWANCE

2. The following is an examiner's statement of reasons for allowance: The response filed on 12/22/2006 has been considered in view of the specification and the drawings of this application with respect to the references of the record. The references of the record taken either alone or in combination fail to teach or suggest a switch arrangement disconnecting the propeller motor from the electrical power network and for short-circuiting the stator windings of the propeller motor to restrain the angular position of the rotor of the propeller motor of the propulsion unit. The references of the record also fail to teach or suggest detecting a need for braking the propeller motor, disconnecting the propeller motor from the electrical power network, and short-circuiting the stator windings of the propeller; and restraining the angular position of the rotor of the propeller motor of the propulsion unit.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Ip whose telephone number is (571)-272-1941. The examiner can normally be reached on Monday to Friday from 6:30 am to 3:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lincoln Donovan can be reached on (571)-272-1988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Paul Ip
Primary Examiner
Art Unit 2837

1/17/2007